

19971101.qrp v00\_n896.qrs.971101

Date: Sat, 1 Nov 1997 19:03:17 EST  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 896

QRP-L Digest 896

Topics covered in this issue include:

- 1) [30047] Glowbugs  
by talljazz@teleport.com (Dan Presley)
- 2) [30047] Re: Looking for 2222 Moses  
by Paul Harden <pharden@aoc.nrao.edu>
- 3) [30047] Re: SMT 2222's  
by laura halliday <ve7ldh@direct.ca>
- 4) [30047] FOX: W2MBY N/T Fox Results Oct 31  
by "W2MBY & W2MY" <n2mnn@spacegate.com>
- 5) [30047] Listserv problems?  
by ab5uacw@juno.com (Clifton W Sikes)
- 6) [30047] Velvet verniers and caps  
by Dale LeDoux <dledoux@laci.net>
- 7) [30047] thank you very much  
by Osvaldo DAngelo <lu7fdz@biblielle.ros.com.ar>
- 8) [30047] Re: your mail  
by Monte Stark <ku7y@sage.dri.edu>
- 9) [30048] Re: Saturday NorTex Meeting  
by Vic Rosenthal <rakefet@rakefet.com>
- 10) [30049] Re: Update on ARK4  
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 11) [30049] Re: Looking for 2222 Moses  
by Robert Bayha <rbayha@ix.netcom.com>
- 12) [30049] HW-8 and OHR DD-1  
by "Steve & Anne Ray" <sbralr@worldnet.att.net>
- 13) [30049] Schematics & PCB's  
by WB0NZM@aol.com
- 14) [30050] Address for 22 2n2222's for a buck  
by "Donald K. Philbin" <dphilbin@slonet.org>
- 15) [30049] Re: How do I protect my HB projects with a diode??  
by K5BDZ <K5BDZ@aol.com>
- 16) [30049] Spots Nov 31, 1997  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 17) [30049] 2N2222A Spice Model Parameters  
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 18) [30050] Source For Cheap LCD Displays  
by astone@erols.com
- 19) [30051] Re: Address for 22 2n2222's for a buck

- by Paul Harden <pharden@aoc.nrao.edu>
- 20) [30049] Re: LIST: 2N2222 Equivalents  
by n5inz@juno.com (John M Andrews)
- 21) [30050] QRP Digest Nov. 1  
by n4so@juno.com (charles k brown)
- 22) [30051] New To QRP World Of Fun  
by KF4EIB@aol.com
- 23) [30052] Re: New To QRP World Of Fun  
by Monte Stark <ku7y@sage.dri.edu>
- 24) [30053] Re: Spots Nov 31, 1997  
by Monte Stark <ku7y@sage.dri.edu>
- 25) [30054] Re: Looking for 2222 Moses  
by David Adams <adamsclan@netgate.net>
- 26) [30055] Dan's Small Parts and Kits  
by Jerry Parker <jparker@fix.net>
- 27) [30056] Computer Noise - A possible solution  
by Bill Todd <bill@techline.com>
- 28) [30057] Web site/GQ2000  
by Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>
- 29) [30058] Re: [CW] SS Info  
by AE0Q V31RY <v31ry@ix.netcom.com>
- 30) [30059] Re: [CW] SS Info  
by AE0Q V31RY <v31ry@ix.netcom.com>
- 31) [30060] Icom 706?  
by timcook@erinet.com
- 32) [30061] Re: Icom 706?  
by "N4ELM" <n4elm@ipass.net>
- 33) [30062] 80M KL Roundtable  
by Paul Stroud <aa4xx@ipass.net>
- 34) [30063] Re: New To QRP World Of Fun  
by Paul Helbert <phelbert@rica.net>
- 35) [30063] New To QRP World Of Fun  
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 36) [30064] Johnson Matchbox  
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 37) [30065] Saturday Flux  
by Joel Malman <malman@BBN.COM>
- 38) [30066] Re: Copper to Aluminum, HOW?  
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 39) [30067] Re: Autek RF-1  
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 40) [30068] For sale: Ramsey 40 meter QRP amp and case  
by Karl Heimbach <heimbach@concentric.net>
- 41) [30069] Re: 2-WIRE YAGI??  
by w4bws@juno.com (Donald E Sanders)
- 42) [30070] Re: 38 Special cases/2N222 Xcvt  
by w4bws@juno.com (Donald E Sanders)
- 43) [30071] Re: CW and JAG

- by w4bws@juno.com (Donald E Sanders)
- 44) [30072] Re: Antenna Help  
by w4bws@juno.com (Donald E Sanders)
- 45) [30073] Re: Help:NVIS antenna info? (lengthy)  
by w4bws@juno.com (Donald E Sanders)
- 46) [30071] Re: 2N2222 Transceiver feasibility  
by w4bws@juno.com (Donald E Sanders)
- 47) [30071] Norcal Paddle Builders - Please read  
by "Bruce Barley" <lbbarley@feist.com>
- 48) [30072] Re: Velvet verniers and caps  
by Dale LeDoux <dledoux@laci.net>
- 49) [30073] Re: Velvet verniers and caps  
by "Bruce Barley" <lbbarley@feist.com>
- 50) [30074] NorCal 2222 Design Notes: Mixers  
by svecbrdk@well.com (L.Svec,W.Burdick)
- 51) [30075] Brughardt Webb page  
by Bill Morris Denton <bdenton@tenet.edu>
- 52) [30075] HW-9  
by Harvey Laidman <Harvey1@outadaloop.com>
- 53) [30076] 2N2222 - Parallel Final Operation  
by Ed Manuel <n5em@flash.net>
- 54) [30076] Re: 2222 design ideas  
by bruce muscolino <w6toy@pop.erols.com>
- 55) [30076] Re: Looking for 2222 Moses  
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 56) [30077] Re: How do I protect my HB projects with a diode??  
by bruce muscolino <w6toy@pop.erols.com>
- 57) [30078] WTB: CW Filter/Auto-Tuner  
by timcook@erinet.com
- 58) [30079] trying to open 10 meters today! give me a call on 28.030...  
by svecbrdk@well.com (L.Svec,W.Burdick)
- 59) [30079] SS 97  
by Monte Stark <ku7y@sage.dri.edu>
- 60) [30080] Dan's Huge End of the Year Sale  
by Jerry Parker <jparker@fix.net>
- 61) [30081] Re: Velvet verniers and caps  
by Dale LeDoux <dledoux@laci.net>
- 62) [30082] Circad demo  
by rheiss@sprynet.com (Rob Heiss)
- 63) [30083] Viking Ranger & such like historical stuff  
by NilsBull@aol.com
- 64) [30084] Silver contacts available, again  
by "mahlon.r.haunschild" <mahlon.r.haunschild@ac.com>
- 65) [30085] Re: trying to open 10 meters today! give me a call on 28.030...  
by "Georgia Raynsford" <raynsford@gci.net>
- 66) [30086] RE: Viking Ranger & such like historical stuff  
by n4js@amsat.org
- 67) [30087] Bad URL, my web pages

by Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>  
68) [30088] Re: Circad demo  
by WB0NZM@aol.com  
69) [30089] 2N2 project  
by Steven Weber <kd1jv@moose.ncia.net>

-----  
Date: Fri, 31 Oct 1997 16:07:16 -0800  
From: talljazz@teleport.com (Dan Presley)  
To: qrp-l@Lehigh.EDU  
Subject: [30047] Glowbugs  
Message-ID: <v01530516b08022ee6aee@[206.163.125.150]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Does anyone have current subscription info for the glowbugs list? Thanks.  
Dan N7CQR

-----  
Date: Fri, 31 Oct 1997 16:52:48 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: Robert Bayha <rbayha@ix.netcom.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [30047] Re: Looking for 2222 Moses  
Message-ID: <Pine.SOL.3.91.971031164251.5419A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am shortly leaving to visit my son in Georgia (Kings Bay Trident Submarine Facility, to be exact) ... and upon my return, hope to prototype a couple of fairly simple circuits been playing with, for the purposes of making them available to whomever wants one, for an SASE, on someone's web site, etc. An article or two may also appear in a future QRPP before Dayton. This has all been discussed and part of Dougs plans. Just realize, this whole 2N2222 thing was just announced a few days ago, so still in it's infancy. But we are not ignoring or forgetting those who do not feel comfortable with designing something yourselves. We want you to join in on the fun, learn plenty of electronics, and have some QSO's with your homebrew rig as much as anyone.

Doug has asked me if I could do some detailed assembly drawings on a

proven circuit. The intent is to provide the schematic AND complete parts layout drawings so you can build it FROM SCRATCH. There will be no PCB, but a layout for building it ugly on copper clad. This will no doubt be a couple of months away, but will be made available when it is ready to those who wish to build it using this approach. The fact you did not design it yourself does not disqualify you from the building contest. As long as you built it yourself. And there will be others who will no doubt share their working circuits with us as well.

7222, Paul NA5N

-----  
Date: Fri, 31 Oct 1997 16:29:23 -0800  
From: laura halliday <ve7ldh@direct.ca>  
To: qrp-l@Lehigh.EDU  
Subject: [30047] Re: SMT 2222's  
Message-ID: <345A77E3.59F87EF8@direct.ca>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Steven Weber wrote:

> Just got a new Mouser catalog today, I noticed you can get the  
> 2222's in surface mount also. (SOT-23, tiny little buggers)

They come in other packages? :- ) :-)

Other than those neat multiples, of course, like MMPQ2222  
(4 2N2222s in an SO-16 package). SOT-23 is actually a very handy  
package to use.

...laura

-----  
Date: Fri, 31 Oct 1997 19:43:08 -0400  
From: "W2MBY & W2MY" <n2mnn@spacegate.com>  
To: "QRP-L message" <qrp-l@Lehigh.EDU>  
Subject: [30047] FOX: W2MBY N/T Fox Results Oct 31  
Message-ID: <002fa12420001b7NS@spacegate.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

This is my list of the hounds that got W2MBY on Oct 31. This is a record for me, 21 contacts in 2 hours. Lots of fun, but lots of work. The first 15 minutes were good. Then everyone gradually ended down in the mud. It seemed that I was clear of carriers here but others have e-mailed me that, where they were, I was in a carrier the entire time. The noise from the BC stations is terrible here after about 01:30. It must not be the same in other parts of country judging from the signal reports below.

During the first 10 minutes I was replying to a lot of stations that were not replying to me. Finally one said "no traffic for the net", and I finally figured it out. If AA0YY/5 reads this, let me know and I will add you to the list. I wasn't sure if you were in the hunt, or the net.

Thanks for all the encouraging e-mail. It is really nice to be appreciated. Makes me want to go out and do it again.

FREQ	UTC	CALL	S	R	ST	NAME
7141.0	01:01	N2WF	569	559	NJ	BILL
	01:10	VE3RC	559	559	SK	BRUCE
	01:15	NI0A	569	579	MN	JOHN
7141.5	01:29	WB0ROQ	219	559	MO	HARLEY
	01:31	KK5KU	339	579	AR	KELSEY
	01:36	W0CH	449	569	MO	DAVID
	01:41	KB0ZDF	449	589	IA	DEAN
	01:47	N4SO	449	449	AL	KEN
	01:51	K5ON	229	569	NM	GARY
	01:53	W0CLR	339	559	MO	JERRY
	01:57	KB0PTE	579	579	MO	WAYNE
	01:59	NQ7X	449	559	AZ	FLOYD
	02:08	KK4KF	219	339	FL	BILL
	02:15	KF4TRD	339	229	FL	MIKE
7141.3	02:20	K5ZTY	449	339	TX	BILL
	02:25	K0EVZ	229	439	MN	DOC
	02:30	WA9PWP	339	459	WI	PAUL
	02:34	VE3ELA	329	449	ON	KEN
7140.7	02:43	WB9HFK	219	549	IL	MARK
	02:49	N6CHV	439	339	FL	MIKE
7140.4	02:58	KE4IZH	339	559	VA	RICK

Everyone who hasn't worked me as a Fox before gets a QSL.

Chuck, K5F0,

I was not on your Nov. 1 N/T FOX list for Oct. 23, when I contacted 15

hounds. If you don't have the info I can e-mail it to you.

See you on 40 meters,

John, W2MBY

n2mnn@ spacegate.com

The e-mail address of:

John Pituch N/T Fox W2MBY (ex KC2CFZ)

Steve Pituch W2MY (ex N2MNN)

-----  
Date: Fri, 31 Oct 1997 15:56:30 EST  
From: ab5uacw@juno.com (Clifton W Sikes)  
To: qrp-1@Lehigh.EDU  
Subject: [30047] Listserv problems?  
Message-ID: <19971031.145245.8127.0.ab5uacw@juno.com>

Jim,

Sorry to use the list for this, but tried to contact you direct, and no go. I have been trying to use some of the listserv functions today, and nothing seems to be working. I need to postpone for a few days.

Sorry to bug everyone with this. Have a great weekend!

72,

Clif

Clifton Sikes AB5UA  
Earlsboro, Ok.  
ab5uacw@juno.com

-----  
Date: Fri, 31 Oct 1997 09:02:55  
From: Dale LeDoux <dledoux@laci.net>  
To: qrp-1@lehigh.edu  
Subject: [30047] Velvet verniers and caps  
Message-ID: <3.0.1.16.19971031090255.2a2fe934@laci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Well, every job has to have its fringe benefits. In my case, we are de-installing some fifites-vintage carrier receiver-transmitter units. these are tube technology, and each unit (I have access to two) has three "Velvet Vernier" drive units with approximately 6" diameter logging scales (stainless steel). Two of the drives are connected to large variable caps (probably up to 300pf and good for antenna tuners up to maybe 150 watts). the third drive on each unit is connected to a variometer inductor suitable for the frequency range of the units, which is in the 80-90khz range. An additional couple of capacitors have direct drives with beautiful 3" stainless logging scales.

Now, the nitty-gritty: I know that this stuff is BIG for a lot of the backpack up Mt. Whitney QRP crowd, but for us homebound ops, this is the makings of some fine equipment. Velvet Verniers used to be one of THE best-known reduction drives. I plan on keeping a couple and parting with the rest. What are such things worth?

Thanks

Dale LeDoux - KD5QI  
Entergy Corporation  
Utility Supervisor

-----  
Date: Fri, 31 Oct 1997 22:02:43 -0300  
From: Osvaldo DAngelo <lu7fdz@bibliele.ros.com.ar>  
To: qrp-l@lehigh.edu  
Subject: [30047] thank you very much  
Message-ID: <199711010109.WAA06668@server.bibliele.ros.com.ar>  
Mime-Version: 1.0  
Content-Type: multipart/mixed; boundary="=====\_878356963==\_"

--=====\_878356963==\_  
Content-Type: text/plain; charset="us-ascii"

--=====\_878356963==\_  
Content-Type: text/plain; charset="us-ascii"

Thank you very much to all praises friends of the list that answered to my question on Amidon.



very grateful, regards:  
oswald - lu7fdz

--=====878356963==\_  
Content-Type: text/plain; charset="us-ascii"

```
*****
#           #   #   #####   #####   #####   #####           LU7FDZ
#           #   #       #   #       #   #       #           Osvaldo DAngelo
#           #   #   -#-   #####   #   #   -#-           Telefax: 041 - 572864
#           #   #   #       #       #       #       #           lu7fdz@bibliele.ros.com.ar
#####   #####   #       #       #####   #####   BV. AVELLANEDA 436 - 2000 Rosario
*****
```

--=====878356963==\_--

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Date: Fri, 31 Oct 1997 17:22:28 -0800 (PST)  
From: Monte Stark <ku7y@sage.dri.edu>  
To: Paul Harden <pharden@aoc.nrao.edu>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [30047] Re: your mail  
Message-ID: <Pine.SUN.3.90.971031172142.5124B-1000000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

As proof I worked an LU3 with about 3 watts on 28.030 today.

Condx are getting better and better!

73, Ron,        SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada.....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

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Date: Fri, 31 Oct 1997 17:23:02 -0800  
From: Vic Rosenthal <rakefet@rakefet.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [30048] Re: Saturday NorTex Meeting

Message-ID: <345A8266.610F@rakefet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Chuck Adams wrote:

>  
> Gang,  
>  
> I called Vic and will pick him up at the hotel first thing in  
> the morning. I have the MIB special issue pen, so afterwards  
> he will remember nothing. We do know why he is here. Those  
> guys in CA will spare no expense in getting information.

Heh, heh. They suspect nothing. I'll have them all in one place at  
about 10:00 tomorrow morning. Remember to train the laser aiming device  
directly onto the camel on my shirt. The rest will be history.

Vic K2VC0

-----  
Date: Sat, 01 Nov 1997 09:12:27 +0800  
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>  
To: n4js@amsat.org  
Cc: qrp@pandora.lugs.org.sg  
Subject: [30049] Re: Update on ARK4  
Message-ID: <345a81fd.pandora@pandora.lugs.org.sg>

On Fri, 31 Oct 1997 16:07:44 -0500 (EST), n4js@amsat.org wrote:

> 1. All DC voltages are nominal in the transmitter.

Have you measured if the MRF-476 is actually turning on?

> 3. At output of Q5, when keyed, there is a momentary RF voltage, which then  
> drops to 0. No output at all.

Hmm.. could it be a bad solder joint? Have you checked that? Could be a dry  
or cold joint somewhere.

> 4. The relay is keying. The momentary output appears at the RF output jack.

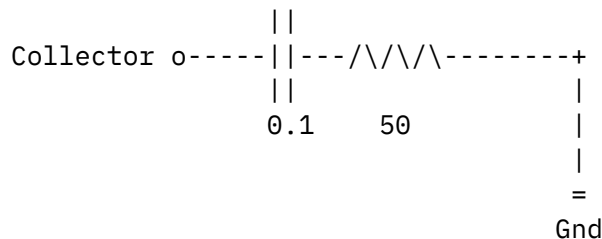
What about the relay socket. Have you checked for actual contact in the PCB?  
I assume you can't get the orientation wrong with the relay.

> 5. No obviously burned resistors. All test OK.

Make sure that all the capacitors are open. Just the other day, I accidentally measured a 470pF capacitor which was shorted! It looked brand new and was unused. I just happened to test it. Scary when you think about where it could have gone or how many more like it are in the junk box.

> I had replaced Q5. No difference. Maybe I better replace it again?

Is the transistor getting hot on long keydowns? (This could be a destructive test). Here's what I would do, measure the RF out with the output filter chain disconnected. Take a 50ohm resistor and put that at the collector of the 476 to ground via a 0.1uF ceramic.



Make sure the output filter chain is isolated. This can be done by simply removing one of the in series capacitors. Now, measure the signal at the collector. Is it still behaving like before? Basically you are trying to ascertain if the 476 itself is working. Since you say that the drive signal is present, I assume this is at the base of the 476?

Hang in there. You will probably find that the eventual fault is something quite trivial :-). They say the problem is probably in the last place you will look.

73 de 9V1ZV Daniel

```
--
+-----+-----+
| Daniel Wee | daniel@pandora.lugs.org.sg |
| 9V1ZV      |                               |
| QRP-L #667 | 9V1ZV@amsat.org             |
+-----+-----+
```

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Date: Fri, 31 Oct 1997 17:29:26 -0800  
From: Robert Bayha <rbayha@ix.netcom.com>  
To: Paul Harden <pharden@aoc.nrao.edu>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [30049] Re: Looking for 2222 Moses  
Message-ID: <345A85F5.12FBE548@ix.netcom.com>  
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Paul Harden wrote:

>

> I am shortly leaving to visit my son in Georgia (Kings Bay Trident  
> Submarine Facility, to be exact) ... and upon my return, hope to  
> prototype a couple of fairly simple circuits been playing with, for  
> the purposes of making them available to whomever wants one, for  
> an SASE, on someone's web site, etc.

-----snip-----

Thanks for your lengthy reply.... This is going to be A WHOLE LOT OF  
FUN! Can't wait!

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Date: Fri, 31 Oct 1997 20:56:51 -0500  
From: "Steve & Anne Ray" <sbralr@worldnet.att.net>  
To: "QRP Group" <qrp-l@Lehigh.EDU>  
Subject: [30049] HW-8 and OHR DD-1  
Message-ID: <19971101015854.AAA7103@pentium>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

I have come up with a simple way to hook up the HW-8 to the OHR DD-1  
Digital Dial. If anyone is interested or you want to post it on the ideas  
page I have it in a Word 6.0 format for the schematic and the text on how  
to do it.

72

Steve Ray      K4JPN      ex K1VKW      HW-101, HW-8, SWL 30-40 and NC 38S Heath  
Kit fan

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Date: Fri, 31 Oct 1997 21:04:22 -0500 (EST)  
From: WBONZM@aol.com  
To: qrp-l@lehigh.edu  
Subject: [30049] Schematics & PCB's  
Message-ID: <971031210421\_1969341051@emout11.mail.aol.com>

I have a suggestion, regarding schematics and circuit board layouts.

There is a schematic cad and pcb layout program called Circad, which is an excellent, AND very easy to use package. It is a commercial package that sells for about \$995.

I have not used the commercial package, however a demo version is available, for free, that allows small schematics and pcb's to be designed. The commercial version will, of course, also generate gerber files, and the demo will not. However, the demo can still be used to design and print small pcb's.

How about if everyone who wants to provide a schematic or pcb here, downloads and uses the demo version of Circad? It should be quite sufficient for this use, and the authors of the program actually encourage such use by hams.

This would allow all of us to be able to print out nice, clean schematics and pcb's. If someone were to design some parts for the parts libraries, those could also be placed on someone's web site for everyone else to download.

By the way, the full-blown commercial version is also available, from a distributor (who is a ham), for about \$295. The only difference between this 'ham' version and the 'commercial' version is that with the commercial version, full technical support is available from the authors. With the 'ham' version, support is only available from the distributor (who actually knows quite a bit about the program, too).

I don't have any connections with the authors of Circad, or with the distributor of the 'ham' version. But I have used the demo version, and to me, it was the easiest package to use that I've ever looked at (and I have looked at several different commercial packages).

The demo version of Circad can be downloaded from [www.holophase.com](http://www.holophase.com), and it can also be found on Compuserve. There's also an FAQ on Compuserve, which is VERY helpful in using the demo version of the program, since the demo does not come with full documentation (although there is pretty good on-line help).

John

-----  
Date: Fri, 31 Oct 1997 18:08:49 -0800  
From: "Donald K. Philbin" <dphilbin@slonet.org>  
To: qrp-l@Lehigh.EDU  
Subject: [30050] Address for 22 2n2222's for a buck

Message-ID: <345A8F31.4043@slonet.org>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Dear NPN heads,

Would someone pass along the address for the person with the  
22 2n2222 for a buck? e-mail or snail mail address is fine..

Happy Halloween,  
D.K. Philbin, KD6TK

-----  
Date: Fri, 31 Oct 1997 21:54:06 EST  
From: K5BDZ <K5BDZ@aol.com>  
To: Arjen.Raateland@vyh.fi, QRP-L@Lehigh.EDU  
Subject: [30049] Re: How do I protect my HB projects with a diode??  
Message-ID: <37adc0fc.345a99a1@aol.com>  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Arjen  
Thanks for the note. I'll look it up in SPRAT  
I'm curious as it sounds ingenious...so many ideas are in SPRAT. Don't tell  
the Brits as they may raise the price of excise taxes on SPRAT.  
73 & will follow up  
Bill, K5BDZ

-----  
Date: Sat, 1 Nov 1997 01:17:21 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-l@Lehigh.EDU  
Subject: [30049] Spots Nov 31, 1997  
Message-ID: <199711010117.BAA09255@chuck.dallas.sgi.com>

It's even getting better.

IV. PENTICTON 10.7 CM FLUX  
OBSERVED 31 OCT 091  
PREDICTED 01 NOV-03 NOV 090/095/095  
90 DAY MEAN 31 OCT 087

FYI es gl n tst

SS de K5F0 K

Chuck Adams K5F0 CP-60 adams@sgi.com  
<http://reality.sgi.com/adams/index.html>

-----  
Date: Sat, 1 Nov 1997 01:50:04 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@Lehigh.EDU  
Subject: [30049] 2N2222A Spice Model Parameters  
Message-ID: <199711010150.BAA09342@chuck.dallas.sgi.com>

For those that have requested the Spice model for the now famous  
2N2222A.

FYI

.model Q2N2222A NPN(Is=14.34f Xti=3 Eg=1.11 Vaf=74.03 Bf=255.9 Ne=1.307  
+       Ise=14.34f Ikf=.2847 Xtb=1.5 Br=6.092 Nc=2 Isc=0 Ikr=0 Rc=1  
+       Cjc=7.306p Mjc=.3416 Vjc=.75 Fc=.5 Cje=22.01p Mje=.377 Vje=.75  
+       Tr=46.91n Tf=411.1p Itf=.6 Vtf=1.7 Xtf=3 Rb=10)  
\*       National pid=19       case=T018  
Chuck Adams K5F0 CP-60 adams@sgi.com  
<http://reality.sgi.com/adams/index.html>

-----  
Date: Fri, 31 Oct 1997 22:36:17 -0800  
From: astone@erols.com  
To: qrp-1@lehigh.edu  
Subject: [30050] Source For Cheap LCD Displays  
Message-ID: <345ACDE1.1AD3@erols.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi -- Anyone have some ideas on where to pick up a 4 digit or so small  
(.5" or so) LCD display. I can't seem to find one for less than about

\$10 in single quantities from the usual sources (Newark, Mouser, Digikey) or the surplus places either. Would appreciate any leads. Thanks.

72,

Ron (KA3J)

-----  
Date: Fri, 31 Oct 1997 20:38:37 -0700 (MST)  
From: Paul Harden <pharden@aoc.nrao.edu>  
To: "Donald K. Philbin" <dphilbin@slonet.org>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [30051] Re: Address for 22 2n2222's for a buck  
Message-ID: <Pine.SOL.3.91.971031202703.12664A-100000@zia>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 31 Oct 1997, Donald K. Philbin wrote:

> Dear NPN heads,  
>  
> Would someone pass along the address for the person with the  
> 22 2n2222 for a buck? e-mail or snail mail address is fine..  
>  
> Happy Halloween,  
> D.K. Philbin, KD6TK  
>  
>

D.K.

I saved the announcement "just in case" ... and upon re-reading it to send you the address, I realized this is a REALLY good deal from HB Electronics just about everyone should partake of. I mean less than 5 cents each, and that includes two of the metal can flavors. I have gotten toroids and varactors from Bob and always with good service (check out his web page for other goodies that might come in handy for this project). I bet he even has a few PNP's for those so daring!

Anyway, here's his original announcement:

-----  
From: "HB Electronics (Bob Berlyn)" <hb\_elec@ids.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: 2222 Design Contest Offer



Good Evening All,

In the spirit of the competition I make the following offer to any one from QRP-L, entering NorCal's 2222 design contest.

For the price of \$1.00 (US or Canadian) currency, coin, check, or stamps or any back issue of QRPp.

I will send you 22 transistors, twenty (20) PN2222, in a T0-92 (plastic) case and two (2) 2N2222's in a T0-18 (metal) case. All the transistors you will need for the design contest.

No shipping charges apply. Just send me a SASE business size envelope with a dollars worth of whatever to:

2222 Contest  
HB Electronics  
43 Rector Street  
East Greenwich, RI 02818

Happy designing and 72  
Bob N1PWU QRP-L#161 East Greenwich, RI

-----  
HB Electronics  
E-Mail: hb\_elec@ids.net  
On The Web: <[http://users.ids.net/~hb\\_elec/](http://users.ids.net/~hb_elec/)>

-----  
Date: Fri, 31 Oct 1997 17:42:08 -0600  
From: n5inz@juno.com (John M Andrews)  
To: pharden@aoc.nrao.edu  
Cc: qrp-l@Lehigh.EDU  
Subject: [30049] Re: LIST: 2N2222 Equivalents  
Message-ID: <19971031.221234.3222.17.N5INZ@juno.com>

2N-6L6? Oh, Joy!

72, John-N5INZ

-----  
Date: Fri, 31 Oct 1997 23:52:46 EST

From: n4so@juno.com (charles k brown)  
To: qrp-1@Lehigh.EDU  
Subject: [30050] QRP Digest Nov. 1  
Message-ID: <19971031.114929.4383.12.n4so@juno.com>

Here is a sample from QRP Digest that comes from Harry, LZ1ZZ/Bulgaria.

+ Home brew

- Hidden Antennas
- F0 transmitters for 10 MHz
- Folded Unipole Antenna (comments)
- Transmitter for TRF Receiver
- SST VXO Range (Thanks W6RCL!)

+ On the air

- ARCI contest - 250 mW style

For a copy-  
request QRPDIG.txt

Ken Brown, N4SO  
QTH nr Mobile, AL/ EM50tk  
qrp-1 #622  
n4so@juno.com

-----  
Date: Sat, 1 Nov 1997 00:18:56 -0500 (EST)  
From: KF4EIB@aol.com  
To: qrp-1@Lehigh.EDU  
Subject: [30051] New To QRP World Of Fun  
Message-ID: <971031231643\_1079050933@mrin39>

Greetings To All,

I'm rather new to trying for QRP fun. Looking for anyone around / near / in Greensboro NC area. Would like some help from anyone in this great quest. Recommend starting out books? Having just joined QRP List, I have noticed a lot of fox hunt e-mail, is this a cw only type of activity? I am also working on the code as to up-grade my ticket, no-code repeaters are fun, but I want MORE!

Any help will be appreciated.

73 Gordon

-----

Date: Fri, 31 Oct 1997 21:46:02 -0800 (PST)  
From: Monte Stark <ku7y@sage.dri.edu>  
To: KF4EIB@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [30052] Re: New To QRP World Of Fun  
Message-ID: <Pine.SUN.3.90.971031213942.5270E-1000000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Gordon,

Want to get the code down and upgrade eh??? Well, Welcome to the very best place for that!!

It will be fun for you to see just how many messages you get that welcome you to this list! It really is a great place.

The Fox hunts are only cw. But they do include N/T+. The whole reason behind them is for people to get their cw skills up and pass the next test! And after passing all the tests to just keep on having fun and getting better and better!

There is also plenty of tech talk going on now about building rigs with only 2N2222 transistors!

Yes, there is a WHOLE lot more than repeaters! In fact one of the funny things about a group of QRPers is that almost none have HT's hanging on their belts!!

Enjoy and I hope to watch you get the code down pat and then get better and better!!

cul,

73, Ron,       SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----

Date: Fri, 31 Oct 1997 21:56:13 -0800 (PST)

From: Monte Stark <ku7y@sage.dri.edu>  
To: Chuck Adams <adams@chuck.dallas.sgi.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [30053] Re: Spots Nov 31, 1997  
Message-ID: <Pine.SUN.3.90.971031214649.5270G-100000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 1 Nov 1997, Chuck Adams wrote:

> FYI es gl n tst  
>  
> SS de K5FO K

Is that mode A or mode B?

I just took Carol out for a nice dinner....good ole' dead cow.

Just thinking about how the next one will be on you.... :-)

(80m antenna hung. Second radio up and running. Alt-R working just fine. Diagg nab it, this is gonna be fun!)

SRI OM UR TOO WEAK  
SS KU7Y SS

: -)

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----  
Date: Fri, 31 Oct 1997 22:11:43 -0800  
From: David Adams <adamscian@netgate.net>  
To: pharden@aoc.nrao.edu, QRP <qrp-1@Lehigh.EDU>  
Subject: [30054] Re: Looking for 2222 Moses  
Message-ID: <345AC81E.59C03E48@netgate.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Paul,

If you guys are still looking for a web page to post 2222 circuits to, by my count I still have about 38 megs of online storage space avail, so I'd be willing to play host. Lemme know.

73 de dave, n9uxu

--

David J Adams, N9UXU      adamsclan@netgate.net  
Amateur Radio, Flow Cytometry, Digital Photography and Parrot enthusiast

<http://ng.netgate.net/~adamsclan>

-----  
Date: Fri, 31 Oct 1997 23:21:33 -0800  
From: Jerry Parker <jparker@fix.net>  
To: qrp-1@Lehigh.EDU  
Subject: [30055] Dan's Small Parts and Kits  
Message-ID: <2.2.32.19971101072133.00b36ae8@fix.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Dan has done it again.

Once again he is running a Huge Year End Sale.

Check out his Catalog at:

<http://www.fix.net/dans.html>

Enjoy,,,72,,,Jerry...WA6OWR...K

-----  
Date: Sat, 01 Nov 1997 23:34:10 -0800

From: Bill Todd <bill@techline.com>  
To: mail4gary@worldnet.att.net  
Cc: qrp-1@Lehigh.EDU  
Subject: [30056] Computer Noise - A possible solution  
Message-ID: <1.5.4.32.19971102073410.006fc5e8@mail.techline.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi There -

I was getting a great deal of noise from my monitor card, and possibly the monitor too on my 486 - especially on 80 meters. Try turning your monitor on and off with the computer running, and see if the monitor is the cause of the noise.

I tried this idea to cure the monitor noise, and it helped eliminate the noise problem quite a bit.

1. Take a piece of RG-8 and cut it to the same length as your monitor cable. Strip off the rubberized coating, and carefully remove the coax braid. Solder a small wire lead, with or without some kind of connector, on the end of the braid wire.
2. Carefully remove or take apart your monitor connector (the part that connects to your CPU), and slip the braid along the length of your cable.
3. Reconnect your monitor cable connector (DON'T attach any of the braid to the inside of the connector).
4. Drill a hole (be sure to guard your computers' innards against metal filings when you do this), or FIND a small hole and attach the braid wire to your CPU.

When I did this, it totally removed all the monitor noise from my rig. I hope this idea works for you.

CUL, Bill-N7MFB

-----  
Date: Fri, 31 Oct 1997 18:40:23 +0000

From: Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>  
To: qrp-1@Lehigh.EDU, gqrp-1@blacksheep.org  
Subject: [30057] Web site/GQ2000  
Message-ID: <KHSACDAXYiW0Ew50@gqrpclub.demon.co.uk>  
MIME-Version: 1.0

Check out for new stuff incl. pics of my GQ2000 rig etc.

--  
Frank, G3YCC  
QRP web page: <http://www.gqrpclub.demon.co.uk>

-----  
Date: Sat, 01 Nov 1997 04:58:23 -0700  
From: AE0Q V31RY <v31ry@ix.netcom.com>  
To: qrp-1@Lehigh.EDU  
Subject: [30058] Re: [CW] SS Info  
Message-ID: <2.2.16.19971101115823.2e37fb16@popd.ix.netcom.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 01:25 01-11-97 GMT, K5FO wrote:

>Here is the list of the toughest sections to get:  
>  
>MAR MT SK AK PR NWT SD PAC MB VI and WY  
>  
>as obtained by looking at N5RZ's and K1IU's breakdown from last year.

I'm leaving right now for Wyoming, will be operating 24 hours from my usual location in the SS. Hope to work everyone!!

73 -- Glenn

-----  
"Remember, any tool can be the right tool!" Red Green

AE0Q / V31RY ex: GM5BKC, ZB2WZ, SV0WY, WA0VPK  
v31ry@ix.netcom.com --SOWP 5558-M, ARRL LM, QCWA LM, NCVA--  
<http://www.qsl.net/ae0q>

-----  
Date: Sat, 01 Nov 1997 05:22:10 -0700  
From: AE0Q V31RY <v31ry@ix.netcom.com>

To: qrp-1@Lehigh.EDU  
Subject: [30059] Re: [CW] SS Info  
Message-ID: <2.2.16.19971101122210.2e373c24@popd.ix.netcom.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 01:25 01-11-97 GMT, K5FO wrote:

>Here is the list of the toughest sections to get:  
>  
>MAR MT SK AK PR NWT SD PAC MB VI and WY  
>  
>as obtained by looking at N5RZ's and K1IU's breakdown from last year.

I'm leaving right now for Wyoming, will be operating 24 hours in the SS from my usual camping location. Hope to work everyone!!

73 -- Glenn

-----  
"Remember, any tool can be the right tool!" Red Green

AE0Q / V31RY ex: GM5BKC, ZB2WZ, SV0WY, WA0VPK  
v31ry@ix.netcom.com --SOWP 5558-M, ARRL LM, QCWA LM, NCVA--  
<http://www.qsl.net/ae0q>

-----  
Date: Sat, 01 Nov 1997 08:01:59 -0500  
From: timcook@erinet.com  
To: QRPL <qrp-1@Lehigh.EDU>  
Subject: [30060] Icom 706?  
Message-ID: <345B2847.991@erinet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Has anyone on this list ever checked into the IC-706 deep enough to see if the very noisy relay that can be heard during full QSK is the T/R relay, or more likely the amp keying relay? I am very interested in a 706 (MKII), but unless I can get rid of that clicking, I would not buy one. I had an IC-737 a few years ago, and it had the same loud clicking relay. I was able to disable it, and make using QSK enjoyable without the distracting relay noise. Thanks in advance for any info..

Tim  
NZ8J



QRP-L #678

-----  
Date: Sat, 1 Nov 1997 08:11:37 -0500  
From: "N4ELM" <n4elm@ipass.net>  
To: <timcook@erinet.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [30061] Re: Icom 706?  
Message-ID: <199711011356.IAA20344@passport.ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

> Has anyone on this list ever checked into the IC-706 deep enough to see  
> if the very noisy relay that can be heard during full QSK is the T/R  
> relay, or more likely the amp keying relay? I am very interested in a  
> 706 (MKII), but unless I can get rid of that clicking, I would not buy

Tim,

I guess the noise is relative. The 706MKII does not seem to be any worse than a stock Ten-Tec Paragon or Corsair II with the amp relay. I did disable the amp relays on the Paragon and Corsair II which got rid of the noise completely. But with headphones on, I really can not hear the 706 switching. If I'm ever able to find the 706 service manual in stock, I'll get it and check it out.

I'm more interested in finding a way to key the radio for tuning besides disabling the keyer. That Tuner button on the front panel looks pretty useless to me without a tuner, maybe it would be a good choice for re-wiring into a key button.

73 - Dave, N4ELM.

-----  
Date: Sat, 01 Nov 1997 09:30:53 -0500  
From: Paul Stroud <aa4xx@ipass.net>  
To: klnet <klnet@acpub.duke.edu>  
Cc: QRP-L <QRP-L@Lehigh.EDU>  
Subject: [30062] 80M KL Roundtable  
Message-ID: <345B3D1D.4EEE37AF@ipass.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi Gang,

It was good to hear a number of fellow QRP'ers last Sunday night, October 26th, on the KnightLite's Roundtable.. The following Knights joined us:

K4NK	Les	Greenville,	SC	449	5W
K1CL	Chuck	Chelmsford,	MA	449	
N5BI	Gary	Gastonia,	NC	599	
AE4IC	Bob	Greensboro,	NC	569	
N7RI	Ralph	Charlottesville,	VA	589	5W
WD9CTB	Jerry	Floyd Knobs,	IN	559	5W
N2TO	Kevin	Brooklyn,	NY	339	5W
N3GO	Gary	Raleigh,	NC	499	
AA4XX	Paul	Raleigh,	NC	(NCS)	5W

Last Sunday's session was more challenging than usual, due to the heavy QRN. We appreciate the good ears you all demonstrate week after week, especially when conditions are rough.

The Roundtable meets each Sunday night local time, at 9:30PM EST (0230 Z) on 3686.4 KHz. This is an open net, and all are invited to join us. Listen for the Net Control station, WQ4RP. This week, our NCS will be Gary, N3GO from Raleigh, NC.

See you on the Roundtable!  
Paul, AA4XX

-----  
Date: Sat, 01 Nov 1997 09:34:02 -0500  
From: Paul Helbert <phelbert@rica.net>  
To: KF4EIB@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [30063] Re: New To QRP World Of Fun  
Message-ID: <345B3DDA.F438C34B@rica.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi Gordon,

Once you get hf privileges you will find that your neighborhood just became much much larger. CW is the most efficient use of our spectrum, of our equipment and the most fun. Hope to hear you on the air.

73,

Paul, Wv3j

KF4EIB@aol.com wrote:

> Greetings To All,  
>  
> I'm rather new to trying for QRP fun. Looking for anyone around / near  
> / in  
> Greensboro NC area. Would like some help from anyone in this great  
> quest.  
> Recommend starting out books? Having just joined QRP List, I have  
> noticed a  
> lot of fox hunt e-mail, is this a cw only type of activity? I am also  
> working  
> on the code as to up-grade my ticket, no-code repeaters are fun, but I  
> want  
> MORE!  
>  
> Any help will be appreciated.  
>  
> 73 Gordon

-----  
Date: Sat, 1 Nov 1997 09:42:30 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:KF4EIB@aol.com" <KF4EIB@aol.com>, Doc Lindsey/K0EVZ  
<70511.3041@compuserve.com>, QRP-L Discussion Group <QRP-L@Lehigh.EDU>  
Subject: [30063] New To QRP World Of Fun  
Message-ID: <199711010943\_MC2-2663-7319@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Gordon:

Welcome aboard! It is great to hear from you. We will all do our best to help you get up and running.

1. You will want join several QRP clubs, such as ARCI, Norcal, Colorado QRP club, GQRP (these are just a few of them). These and others have

quarterly QRP journals and web pages. 73 magazine, CQ, QST and WorldRadio have columns on QRP.

2. Plan on going to the Hamvention in Dayton, Ohio. Lots of QRPers go there annually (it's in May). There is a special QRP event/banquet as well as a building contest. Lots of technical gurus go to Dayton, and you rub shoulders with QRPers from all over, including overseas. Plus you can see the latest gear from the developers. Bring lots of cash for this feature of Hamvention! Wow, what a great event (in May each year).

3. There are several websites and Internet newsgroups dealing with subjects of interest to QRPers.

4. Go to hamfests and buy books on antennas and QRP subjects. And of course watch this QRP-L reflector for upcoming contests. There will be one coming up on 3 November 97. You will definitely want to take part in the FOXhunts of course.

So welcome aboard! Good luck. And if you have a question or problem, simply ask on this reflector. You are at the right place.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL WAS 48/40  
DXCC 55/42 <>< FOX Total 10/31/97 10 of 11 + 8 of 9 N/T+ FOX.

-----  
Icom 751A Omni V Sierra Argo 515 Norcal 40a SW-40 49er 38S  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D GAP TNT/2 Windom  
SLV/W6MMA G5RV Auttek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Sat, 1 Nov 1997 09:52:14 -0500 (EST)  
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>  
To: towertalk@contesting.com, QRP-L List <qrp-l@Lehigh.EDU>, gqrp-l@blacksheep.org  
Subject: [30064] Johnson Matchbox  
Message-ID: <Pine.SOL.3.94.971101094035.5224A-100000@utkux4.cas.utk.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have heard the Johnson Matchbox described as a modified Z match, which is not quite right. Having just obtained one, I thought I might describe the circuit, which appears to be very similar to the link coupler offered by

Annecke in Germany.

The circuit is a straightforward link-coupled circuit. The input with the relay and associated circuitry includes taps for a 50-ohm transmitter connection and a 300-ohm receiver connection, since receivers continued to use balanced input strips long after transmitters had gone to shielding, pi networks, and 50-ohm outputs.

The secondary coil is tapped at reasonable positions for 80/40/20/15/10 meters, shorting out the unused turns toward the outer ends. Across the outer limits of the coil is a split stator capacitor, center grounded, which is used to set the tank at resonance. The required value of capacitance will vary somewhat as the reactance and resistance at the antenna terminals is varied.

The terminals are not connected directly to the outer limits of the tank. Each side of ground passes to a butterfly capacitor. The center of each butterfly goes to the antenna terminal. A butterfly capacitor is a split stator variable arranged so that as capacitance on one side goes up, it decreases on the other. The antenna terminal on each side of ground is thus set at a certain reactance from ground and certain series reactance from the tank, while the reactance across the entire capacitor remains roughly constant. This arrangement forms a voltage divider. It also forms a means of compensating for reactance at the antenna terminal of the tuner, allowing it to match a wide range of  $R \pm jX$  combinations that might be present at the antenna terminals and still present the requisite high impedance to the tank circuit ends.

The design goes back to AM days, so the 275 watt rating is likely not only conservative, but conservative to the power of the carrier plus side bands of a 100% modulated AM signal. Capacitors appear to be spaced for at least 3 kV or better (according to some old capacitor listing in the 1952 ARRL HB advertising section). The KW matchbox uses the same circuit with beefed up components (7 kV capacitors) and only some slight connection changes.

Perhaps the only thing I would do to improve the design is not mechanically feasible: to have a rotary coil with contra-rotating sections to permit the full span of taps in order to eliminate the switch. Goal is to make available the most efficient coil settings for every possible set of  $R \pm jX$  presented, but I have no idea of how to make that work mechanically and preserve the center link and main coil center efficiency.

I thought those who have never seen a Matchbox might be interested in the basic design. Love those elegant Johnson panel colors.

I have one question others might be able to answer for me. My unit has a U-channel directional coupler contact cemented to the bottom of the chamber, while the paperwork calls for the external directional coupler

(which I also have). I am wondering if the SWR directional coupler I have is someone's personal modification or something the factory did in some runs. The panel meter is original. The relay and receiver terminal strip has been removed.

I hope the information is useful (and reasonably accurate), and that the question has an answer (just to satisfy my curiosity).

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\ /\ *	/ / /	(Off) (423) 974-7215
1434 High Mesa Drive	/ \ / \	----/\---	(Hm) (423) 938-6335
Knoxville, Tennessee	/\ \ \ \	/ /    /	(FAX) (423) 974-3509
37938-4443 USA	/ \ \ \ \		cebik@utk.edu
URL: <a href="http://funnelweb.utcc.utk.edu/~cebik/radio.html">http://funnelweb.utcc.utk.edu/~cebik/radio.html</a>			

-----  
Date: Sat, 1 Nov 97 10:42:24 EST  
From: Joel Malman <malman@BBN.COM>  
To: qrp-1@Lehigh.EDU  
Subject: [30065] Saturday Flux  
Message-ID: <199711011542.KAA68006@nss4.cc.Lehigh.EDU>

Group,

> It's even getting better.  
>  
> IV. PENTICTON 10.7 CM FLUX  
> OBSERVED 31 OCT 091  
> PREDICTED 01 NOV-03 NOV 090/095/095  
> 90 DAY MEAN 31 OCT 087

I could have guessed at these numbers. Last night 17 meters was open from New England to Japan.

Check out your radio today folks! It's got to be easily over 100 today (Sat). 17 m was open so I check 15 and it's open also --- but best of all 12 METERS IS OPEN also!!!! A lot of very strong Europe so far this morning.

I checked 10 meters -- nothing heard. 10 could be open and no one knows it.

/joel wa1qvm

-----  
Date: Sat, 1 Nov 1997 09:10:41 -0500  
From: "Bob Kellogg" <ae4ic@nr.infi.net>  
To: <cjcaro@classic.msn.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [30066] Re: Copper to Aluminum, HOW?  
Message-ID: <199711011547.KAA06487@mailhost.infi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Just last night I was reading how to solder aluminum in one of the G-QRP publications. (don't remember which one, but if it's really important I could search for it) This is how it's done:

Put a coat of oil on one of the surfaces to be joined. Use a fairly large iron, be sure it's hot, and the tip is tinned and clean. Put a the tip and a little solder to the aluminum rubbing the aluminum surface slightly. The oil keeps the surface from oxidizing, and a thin coat of solder will stick when the aluminum is hot enough. Treat the second surface in the same manner. When both surfaces are tinned, put them in their final position and solder with a bead of solder.

Will this work with aluminum and copper? I don't know, but it's worth a try.

CUL,  
Bob Kellogg, AE4IC, Greensboro, NC  
Prolably, but not nececelery. -- Benny Hill

-----  
> What is the best  
> way to connect copper to aluminum with it being exposed to the elements  
> (acid rain)?

-----  
Date: Sat, 1 Nov 1997 10:41:16 -0500  
From: "Bob Kellogg" <ae4ic@nr.infi.net>  
To: <Bob\_Tellefsen-CNSE97@email.mot.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [30067] Re: Autek RF-1  
Message-ID: <199711011547.KAA23251@mailhost.infi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Bob,

I agree with your assesment of the RF-1. I have an MFJ-259 also and use them both. But if I had to pick just one for antenna work, it would be the RF-1.

> I have only one complaint with the little box. The power on/off  
> switch is a pushbutton that is easily bumped. This also makes it  
> difficult to carry in a pocket without turning it on somewhere along  
  
> the way. I find that if I am traveling with it, it is better to  
just  
> remove the battery. Then bumping the RF-1 won't accidentally turn  
it  
> on and run the battery down.

I had that same problem. I keep my RF-1 in a little cloth zipper bag that's just big enough to hold it, the instructions for use and the test leads. FB. \*except\* everytime I tried to use it the battery was down because the switch had been bumped. SO, I had some 1/8 thick plexiglas (or some kind of plastic) which I cut into two 1/8" square strips about 1/2" long. Glued them either side of the protruding on/off switch. Problem solved. It's still easy to switch on and off with your finger, but casual bumping doesn't do it.

CUL,  
Bob Kellogg, AE4IC, Greensboro, NC  
Prolably, but not nececelery. -- Benny Hill

-----

>  
> Standard disclaimer:  
> I have no involvement with Autek other than a satisfied user.  
>  
> 72, Bob N6WG and Ol' Kenwood

-----

Date: Sat, 01 Nov 1997 10:04:24 -0600  
From: Karl Heimbach <heimbach@concentric.net>



To: qrp-l reflector <qrp-l@Lehigh.EDU>  
Subject: [30068] For sale: Ramsey 40 meter QRP amp and case  
Message-ID: <345B5308.CCC@concentric.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi gang,

I have an unassembled Ramsey 40 meter QRP amp and matching Ramsey case for sale. Asking \$55.00 shipped.

Thanks,

Karl - W5QJ

-----  
Date: Sat, 01 Nov 1997 11:05:26 EST  
From: w4bws@juno.com (Donald E Sanders)  
To: qrp@netins.net  
Cc: qrp-l@Lehigh.EDU  
Subject: [30069] Re: 2-WIRE YAGI??  
Message-ID: <19971101.121732.5079.4.W4BWS@juno.com>

Dave and all: another way to do the combo refklector/director is to make the center like you explain and add capacitor or coil to resonate at director or reflector frequency as required . They can be switched at ground level.

Another alternative antenna is the "ZL Special" I have used it several times for QRP and field day.

Donald E. Sanders W4BWS  
694 E. Eau Gallie Blvd. Satellite Beach, Fl 32937  
407-779-0222 Fax 407-779-0830  
E-mail to w4bws@juno.com  
My favorite QRP rig glows in the dark

-----  
Date: Sat, 01 Nov 1997 11:05:27 EST  
From: w4bws@juno.com (Donald E Sanders)  
To: n4js@amsat.org  
Cc: qrp-l@Lehigh.EDU  
Subject: [30070] Re: 38 Special cases/2N222 Xcvt  
Message-ID: <19971101.121732.5079.7.W4BWS@juno.com>

OK- new thought- design the 2N2222 Xcvr to fit into the 30 special case-  
keep the rigs matching.

Donald E. Sanders W4BWS

694 E. Eau Gallie Blvd. Satellite Beach, Fl 32937

407-779-0222 Fax 407-779-0830

E-mail to w4bws@juno.com

My favorite QRP rig glows in the dark

-----  
Date: Sat, 01 Nov 1997 11:05:26 EST

From: w4bws@juno.com (Donald E Sanders)

To: dcscott@us.ibm.com

Cc: qrp-1@Lehigh.EDU

Subject: [30071] Re: CW and JAG

Message-ID: <19971101.121732.5079.2.W4BWS@juno.com>

On Wed, 29 Oct 1997 11:31:49 -0500 Dale Scott <dcscott@us.ibm.com>

writes:

>Don't know if any of you saw the episode of JAG last night but there was  
a

>brief sequence where one F-14 send a CW message to another F-14 (which  
>had no radios) using a flashlight. Interesting part was that the  
message

>supposedly said something to the effect "your wife and daughter are  
alright" all

>in the space of about 10-15 seconds at 6-7wpm. Wish I knew how to do  
that!!

>72/73

>Dale/kc7khd

Picky,picky,picky

Donald E. Sanders W4BWS

694 E. Eau Gallie Blvd. Satellite Beach, Fl 32937

407-779-0222 Fax 407-779-0830

E-mail to w4bws@juno.com

My favorite QRP rig glows in the dark

-----  
Date: Sat, 01 Nov 1997 11:05:26 EST

From: w4bws@juno.com (Donald E Sanders)

To: bmug@gwl.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [30072] Re: Antenna Help  
Message-ID: <19971101.121732.5079.5.W4BWS@juno.com>

Brad, I have the same set up with a patch panel at each location. The antennas come to one patch panel with a Tee adaptor on each of the panel BNC feedthrus and a coax then going to the other room for each antenna. I have six antennas rigged this way with no problem. Just remember to disconnect the rig from the patch panel when you finish operation. Not a bad idea anyway to prevent near by lightening from discharging into the front end of the rig.

If you don't want all those coaxes then only use it on your all band dipole for the second location.

Donald E. Sanders W4BWS  
694 E. Eau Gallie Blvd. Satellite Beach, FL 32937  
407-779-0222 Fax 407-779-0830  
E-mail to w4bws@juno.com  
My favorite QRP rig glows in the dark

-----  
Date: Sat, 01 Nov 1997 11:05:26 EST  
From: w4bws@juno.com (Donald E Sanders)  
To: JCoote@aol.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [30073] Re: Help:NVIS antenna info? (lengthy)  
Message-ID: <19971101.121732.5079.1.W4BWS@juno.com>

Doc & the list:

Back during the Vietnam conflict( I still think it was a war) there was a need for the hamlet radio network to communicate over short distances and my company made several hundreds of a antenna for near the forty meter band for this use for the military. It consisted of a folded dipole mounted on 8 foot poles with 3 half wave wires laying on the ground, spaced 10 feet apart, forming a good reflector. The whole antenna rolled up into a canvas sack and the aluminum poles fitted into an attached canvas tube sack. I haven't seen any surplus but it is very easily made and I have used similar antenna for field day and emergency use. Great for short haul.

Have fun !

Donald E. Sanders W4BWS  
694 E. Eau Gallie Blvd. Satellite Beach, FL 32937  
407-779-0222 Fax 407-779-0830  
E-mail to w4bws@juno.com  
My favorite QRP rig glows in the dark

-----  
Date: Sat, 01 Nov 1997 11:05:26 EST  
From: w4bws@juno.com (Donald E Sanders)  
To: ji3m@maxwell.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [30071] Re: 2N2222 Transceiver feasibility  
Message-ID: <19971101.121732.5079.3.W4BWS@juno.com>

Duffey et all , as I read the rules double balanced mixers are not disallowed- you just have to use discrete devices and wind your own toroids. Source of info is numerous VHF converters and mixer articles in every ham publication in last 20 years. It can be active if you waste a few 2n2222's in the mixer. Try both active mixing and passive with amplifier and evaluate the tradeoff of increased gain vs need to use active devices- lots of fun ahead for the cold months- Note of caution for the newbees- the pointed end on the soldering iron is HOT !!

Donald E. Sanders W4BWS  
694 E. Eau Gallie Blvd. Satellite Beach, Fl 32937  
407-779-0222 Fax 407-779-0830  
E-mail to w4bws@juno.com  
My favorite QRP rig glows in the dark

-----  
Date: Sat, 1 Nov 1997 10:33:05 -0600  
From: "Bruce Barley" <lbbbarley@feist.com>  
To: <qrp-1@Lehigh.EDU>  
Subject: [30071] Norcal Paddle Builders - Please read  
Message-ID: <199711011632.KAA10797@wichita.fn.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

As an update on the discussion of using feelers when setting up and adjusting your Norcal Paddles, I have a LIMITED quantity of .001, .003 and .005 shim stock material which will work FB as a feeler guage. The .001, and .003 material is metal. The .005 is plastic.

For .002, you can fold the .001 double. For .004 use the .001 and .003 together... etc.. etc...

If you send me a SASE, I will cut a strip of each and send it to you at no charge. No spam - no velveeta - just 3 strips of shim stock to use as feeler guages.

Please mail your SASE to: FEELER

PO BOX 581  
KECHI, KS 67067-0581

Bruce Barley KB0PZD qrp-1 #69  
lbbarley@feist.com

-----  
Date: Sat, 01 Nov 1997 00:36:32  
From: Dale LeDoux <dledoux@laci.net>  
To: qrp-1@Lehigh.EDU  
Cc: bruce muscolino <w6toy@pop.erols.com>  
Subject: [30072] Re: Velvet verniers and caps  
Message-ID: <3.0.1.16.19971101003632.36ffee1c@laci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 08:21 11/1/97 -0500, you wrote:

>Dale,

>

>In general they are worth whatever someone will pay for them. A year ago,  
>at the hamfest in Odenton, Maryland, I bought a mint National Velvet Vernier  
>dial assembly, in its original box, for \$2.00.

>

>I also saw reduction drives yesterday, on Dan's page, for prices I thought  
>were obscene. Were you planning to sell the whole unit or just the pieces?  
>As you know, the old addage of the whole being equal to the sum of its parts  
>does not apply to vintage electronics!

>

>73

>

>

>

Bruce:

I was planning to pull them from the equipment. The thing they come out of is an old 19" rack-mount carrier transmitter. It sends data to the terminal at the other end of the circuit by piggy-backing its 85khz output onto a 138KV transmission line through a coupling capacitor. (anybody want a capacitor rated for 145kv?) The tubes were mounted on a strip so they could be removed from the front of the rack without removing any covers. The black crinkle paint is in horrible shape. Who'd want such a thing? Presently, the equipment is intact as removed from the rack except for the wiring harness which attached it to other components in the rack.

Had a thought about a 'lowfer' rig, but....nahhhh! That's hard enough with

current technology...

So, I plan on keeping a couple of drives for my self and offering up the rest...

Dale LeDoux - KD5QI  
Entergy Corporation  
Utility Supervisor

-----  
Date: Sat, 1 Nov 1997 10:52:50 -0600  
From: "Bruce Barley" <lbbarley@feist.com>  
To: <dledoux@laci.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [30073] Re: Velvet verniers and caps  
Message-ID: <199711011652.KAA16637@wichita.fn.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Phooey! You didn't buy it. YOU STOLE IT ! And what's more - you are admitting it IN PUBLIC !  
There's a special place in HELL reserved for people like you.... <grin>

The only way that you can avoid Eternal Damnation is that you have to actually use it in a project, and then actually make contacts with the completed project on the air. Each day that the Velvet Vernier sits on a shelf, unbuilt just adds another day to your time in Purgatory. For every contact made, you reduce your time in Purgatory by one day. QRP counts double.

Dale - People will line up all day to buy these Velvet Verniers at \$50/ea. if they are in good condition. Let your conscience be your guide.

Bruce Barley KB0PZD qrp-l #69  
lbbarley@feist.com

-----  
> From: Dale LeDoux <dledoux@laci.net>  
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
> Subject: Re: Velvet verniers and caps  
> Date: Friday, October 31, 1997 6:36 PM  
>  
> At 08:21 11/1/97 -0500, you wrote:

> >Dale,  
> >  
> >In general they are worth whatever someone will pay for them. A year ago,  
> >at the hamfest in Odenton, Maryland, I bought a mint National Velvet Vernier  
> >dial assembly, in its original box, for \$2.00.

-----snip -----

-----  
Date: Sat, 1 Nov 1997 09:05:42 -0800  
From: svecbrdk@well.com (L.Svec,W.Burdick)  
To: qrp-l@Lehigh.EDU  
Subject: [30074] NorCal 2222 Design Notes: Mixers  
Message-ID: <199711011657.IAA24889@smtp.well.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Now that the PNP radicals have settled down and the infamous Tony Two Toes broadcast is history, it's time to settle into the 2222 season, a warm cup of Ovaltine on the desk and a cat on your NEC Multiscan. Or whatever :)

Continuing in the NorCal 2222 tradition of hint-sharing:

-- You can make a diode double-balanced mixer (DBM) with four diodes matched for forward resistance using a DMM and a couple of toroidal transformers; see Solid State Design, the Handbook, etc. (The rules only exclude an \*integrated\* DBM.) You should use a symmetrical layout for the mixer components and the shortest possible leads to minimize unwanted port-to-port coupling. Also...

-- A little-known fact among experimenters is that a smaller toroid core will "talk" less to other circuits than a larger one. In the case of mixers, this means better attenuation of products for which the mixer is balanced. Why does a small toroid couple less energy to the outside world? Because a toroid looks to the outside world like a one-turn inductor (although this varies somewhat with the type of winding). The larger the toroid, the larger this single turn becomes. For example, at 10Mhz and an inductance of 2uH, a T12-2 core (0.125" diameter) may "leak" up to 15dB less signal to a nearby core than would an equivalent coil wound on a T37-2 core (0.37" diameter). (This assumes identical, short leads on both cores.)

-- In addition to diode-based DBMs, you can make an active or passive DBM

using four, six, or eight 2222s, depending on the configuration. Take a look at the LM1496 or NE602 spec sheets for ideas.

-- A single-balanced mixer (SBM) may be just fine depending on what you're designing. For example, if the mixer is balanced with respect to the local oscillator but not to the RF input, you may be able to get performance as good or better than a DBM if the RF is filtered at the mixer output by means of a tuned IF. In fact many commercial ham receivers use an SBM.

-- A single-balanced mixer can be made from two diodes OR from two 2222s. In the latter case, the mixer can be active or passive. The active mixer will have gain that may preclude the need for an RF amp even on some of the higher bands. On 40 or 80 meters an RF amp is almost certainly not needed, even if the mixer has 7 or 8dB loss. But you'll need quite a bit of I.F. amplification.

-- There's a great, passive, high-level switching-type SBM circuit in some recent Handbooks that is based on two 2N5179s. While this part has lower noise than a 2N2222 at high frequencies, at HF--especially the lower bands--the 2222 will work just fine in this application.

-- Even a completely UNbalanced mixer will work in many cases, although it will be harder to obtain good strong-signal performance with an active mixer based on a single 2222. Balanced is a better idea.

-- If you need a product detector, which is actually just another mixer, all of the above still applies. However, in this case a single-balanced arrangement is completely adequate, since all of the unwanted RF products are removed in the output circuit by simple bypassing to ground using .01uF or more of capacitance. There are many such circuits published in the Handbook, etc.

73,

Wayne  
N6KR

-----  
Date: Sat, 1 Nov 1997 10:59:22 -0600 (CST)  
From: Bill Morris Denton <bdenton@tenet.edu>  
To: qrp-l@Lehigh.EDU  
Subject: [30075] Brughardt Webb page



Message-ID: <Pine.OSF.3.96.971101105137.4171A-100000@francis.tenet.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang I didn't know I was going to start a land slide to Burghardt Amateur Radio Center in South Dakota. I had several request for the webb page addr. So will do it collectivly. You can get there by searaching Brughardt and the address is daknet.com/~burghart OR look in a QST or CQ mag. for their ad's. I have no connection with them other than having some very good dealing with them.

Good luck Bill W5SB

If you do a search'''I notice that their name is spelled differently in the address than it is in actual correct spelling.

-----  
Date: Sat, 01 Nov 1997 09:52:06 -0800  
From: Harvey Laidman <Harvey1@outadaloop.com>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [30075] HW-9  
Message-ID: <345B6C46.4D2DBA24@outadaloop.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hello QRP'ers and I am thrilled to have found this group. I've been interested for many years, belong to MI-QRP, QRP ARCI, FISTS, etc. Kinda' hate to make my first post a "for sale" but I got here because I posted this on a packet network and someone told me about this list - so, anyway:  
"Expertly constructed Heath HW-9 with WARC kit installed, PSA-9 power supply, HFT-9A QRP antenna tuner, HM-9 QRP wattmeter - a complete station in delicious Heath chocolate brown and in mint condition (some scratches on PSA-9). A pleasure to use and a treasure to own, with all construction and operating manuals.  
I am asking \$400.00, buyer pays shipping. I am located near Los Angeles, CA."  
(I'm thinning out all my stuff, and I feel particularly sad about parting with the HW-9. In many ways, I think it's got it all over my QRP+, but I've got a little

corner of my suitcase  
carved out for the "plus" when I travel. The HW-9 doesn't get much  
use.)  
...Harvey, W8DX

--

---Harvey1@outadaloop.com -- URL: HTTP://outadaloop.com---

-----  
Date: Sat, 1 Nov 1997 11:55:12 -0600  
From: Ed Manuel <n5em@flash.net>  
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>  
Subject: [30076] 2N2222 - Parallel Final Operation  
Message-ID: <01BCE6BD.20417760@hsh11-210.flash.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: quoted-printable

Gang,

Someone mentioned an old article about using multiple 2N2222s in a final =  
amp.

Check out SPRAT #51, Summer, 1987 page 11-12 for an article by Doug =  
DeMaw. He describes the use of four (4) in a final amplifier using 100 =  
- 150 mw. drive for 1 watt output. The article was for 7 mhz. but =  
suggests that this technique would work with 2222s up to around 30 mhz. =  
He notes that the transistors became quite warm but at a 50% CW duty =  
cycle never needed heat sinks. I am assuming metal can 2N2222s, of =  
course.

Basically, parallel the bases and collectors and take each emitter to =  
ground with a 1 ohm resistor. He suggests spending a little time =  
matching the transistors and describes two methods. One is to apply 9 - =  
12 volts through a ma. meter to the collector, ground the emitter =  
through a 1 ohm resistor and apply 1 vdc. to the base. Match to within =  
5% the collector current.

So there. If you are not happy with a quarter of a watt, go for the =  
gusto.

Ed, N5EM  
n5em@flash.net

-----  
Date: Fri, 31 Oct 1997 19:12:05 -0500 (EST)  
From: bruce muscolino <w6toy@pop.erols.com>  
To: DYARNES@aol.com  
Cc: QRP-L@Lehigh.EDU  
Subject: [30076] Re: 2222 design ideas  
Message-ID: <2.2.16.19971031200405.2e3741dc@pop.erols.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
>I may be misinterpreting you statement, but I don't believe the winner is (or  
>needs to be) assigning his "rights" or his property to NorCal. Correct me if  
>I am wrong Doug.

>  
I sure the winner is not assigning his rights anywhere. But, this is a  
NorCal contest and they ought to have first shot at publishing the work.  
That only seems fair. All I was asking for was some advance warning if I  
got a paper from the "winner". It implies I would tell Doug what I had.

73

-----  
Date: Sat, 1 Nov 1997 11:27:32 -0500  
From: "Bob Kellogg" <ae4ic@nr.infi.net>  
To: <pharden@aoc.nrao.edu>, "Low Power Amateur Radio Discussion" <qrp-  
l@Lehigh.EDU>  
Subject: [30076] Re: Looking for 2222 Moses  
Message-ID: <199711011803.NAA32513@mailhost.infi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Paul and Doug,

Just want to say that the approach you are taking to the 2222 contest is  
excellent. It's great to see the designers among us doing some of their  
"thinking out loud" for the rest of us to hear. Publishing some "building  
blocks" with a little commentary will make the contest available to  
everyone.

So far, my thought process has been like this:

First announcement:

"Well that sounds like an interesting contest, but I've got a lot of irons in the fire. It would be a lot of sweat and strain for me to design something from scratch. Guess I'll pass." [DELETE]

Letters discussing various circuit sources:

"Gosh, I've got some of those books, and now that I think about it, the 2222 is used a lot. I bet I could use those circuits to build something. I've got a bunch of 2N2222's."

Second posting of the rules:

"Hmm, I think I'll save those. I might have time to work on something"

More letters, one discussing a rig built on an 8" X 8" board:

Without thinking further, I check my circuit board supply, and pull a stack of QRP circuit books. No doubt about it, I'm hooked.

Leafed through the books last night, rediscovering a lot of neat stuff that I'd forgotten about. (like how to solder aluminum) And, a lot of suitable circuits. Noted that TECH America has the MPS2222's for .09 in quantities over 10. Also have some cheap Surface Mount 2N2222's. (Oops, didn't mean to say that!)

Mine won't be the most sophisticated, and it won't be the optimum in performance, because I'm not a designer and will (probably) not get all of the impedances matched, etc. But, I'm going to build \*something\* ugly style. If it works, I'll have learned something. If it doesn't work I'll have learned something.

In the current vernacular, its a Win - Win situation! Thanks again you guys, for plowing ahead!

CUL,

Bob Kellogg, AE4IC, Greensboro, NC

Prolably, but not nececelery. -- Benny Hill

-----

> I am shortly leaving to visit my son in Georgia (Kings Bay Trident  
> Submarine Facility, to be exact) ... and upon my return, hope to  
> prototype a couple of fairly simple circuits been playing with, for  
> the purposes of making them available to whomever wants one,

-----

Date: Fri, 31 Oct 1997 19:12:24 -0500 (EST)

From: bruce muscolino <w6toy@pop.erols.com>

To: JakeCart@ix.netcom.com  
Cc: QRP-L@Lehigh.EDU  
Subject: [30077] Re: How do I protect my HB projects with a diode??  
Message-ID: <2.2.16.19971031200425.2e377fa2@pop.erols.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>

>My question is this: I have a bunch of 1N4004 and 1N4007 diodes that were  
>in my Dan's Small Parts "grab bag". Can I wire one of those diodes into  
>the power lead for my HB projects to that I don't damage any more of these  
>very fine kits?

>

>Thanks,  
Presumably you are trying to protect your projects from applying reverse polarity power? The easiest way to do this with a diode is to put one in series with the positive power lead. If you connect the battery correctly, plus to plus, etc., the diode will be forward biased and will conduct. If you reverse the power leads, minus to plus, the diode will be reverse biased and will not conduct. The downside of this kind of protection is you loose the forward voltage drop of the diode, typically .7 volts. Of course, since you're running QRP, this probably does not matter much!

If you want to protect your rig without loosing .7 volts to a silicon resistor, switch to polarized power plugs and use them!

73

-----

Date: Sat, 01 Nov 1997 13:43:37 -0500  
From: timcook@erinet.com  
To: QRPL <qrp-l@Lehigh.EDU>  
Subject: [30078] WTB: CW Filter/Auto-Tuner  
Message-ID: <345B7859.3D2F@erinet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Looking for:

1. FL-63A 250 HZ cw filter for the IC-735
  2. 100w version of the LDG Auto tuner AT-11
- Please email direct if you have one for sale  
Thanks  
Tim

NZ8J

-----  
Date: Sat, 1 Nov 1997 11:11:40 -0800  
From: svecbrdk@well.com (L.Svec,W.Burdick)  
To: qrp-1@Lehigh.EDU  
Subject: [30079] trying to open 10 meters today! give me a call on 28.030...  
Message-ID: <199711011903.LAA20965@smtp.well.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

You may hear me using the KC2 keyer's repeat function to call CQ endlessly on 28.030 today with 2 watts and a random wire. I checked the band, and it seems to be partly open.

Wayne  
N6KR

-----  
Date: Sat, 1 Nov 1997 11:23:39 -0800 (PST)  
From: Monte Stark <ku7y@sage.dri.edu>  
To: QRP-L <qrp-1@Lehigh.EDU>  
Subject: [30079] SS 97  
Message-ID: <Pine.SUN.3.90.971101111638.5826A-1000000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Every is ready....I think!

Cows are fed and watered. They are even on the right side of the fence!

Got the tower loaded up on 80m.

First radio will change bands and antennas by just following where the computer goes. Except on 80m where I need to flip one antenna switch.

Second radio is using the vertical and will become active

with a simple Alt-R from the keyboard. This radio will be used to listen to see which bands are open and to use while turning the yagi, if I need to turn it!

All systems tested....

I'll be trying to work on the highest band that is open and producing a good rate. Will be CQing if I can hold a frequency. With QRP that's always a big question mark!

Hope to work you all.

And I even have a program that will print labels for the qsl cards! Should make that chore much better. :-) And I will even get all caught up this winter....

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----  
Date: Sat, 01 Nov 1997 11:47:50 -0800  
From: Jerry Parker <jparker@fix.net>  
To: qrp-l@Lehigh.EDU  
Subject: [30080] Dan's Huge End of the Year Sale  
Message-ID: <2.2.32.19971101194750.00b35eb4@fix.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hey,

wouldnt you know it.

Posted Dan's, extensive, cost cutting/big savings

"End of the Year Sale" and announced it to the world.

The response must of been overwhelming for the

server immediately crashed.

Email works and I can bring up other pages on other servers but no go on www.fix.net.

So, what to do.

Here you go.

I have posted Dan's Catalog on the following URL's also and will leave it there in addition to its regular home.

So you can get a look.

<http://www.concentric.net/~parker4/dans.htm>

<http://www.concentric.net/~parker4/dans.html>

Enjoy, 72,,,Jerry...WA6OWR...K

-----  
Date: Sat, 01 Nov 1997 04:49:56  
From: Dale LeDoux <dledoux@laci.net>  
To: lbbarley@feist.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [30081] Re: Velvet verniers and caps  
Message-ID: <3.0.1.16.19971101044956.0b47eb76@laci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 10:52 11/1/97 -0600, you wrote:

>Phooey! You didn't buy it. YOU STOLE IT ! And what's more - your are  
>admitting it IN PUBLIC !  
>There's a special place in HELL reserved for people like you.... <grin>  
>  
>The only way that you can avoid Eternal Damnation is that you have to  
>actually use it in a project, and then actually make contacts with the  
>completed project on the air. Each day that the Velvet Vernier sits on a



>shelf, unbuilt just adds another day to your time in Purgatory. For every  
>contact made, you reduce your time in Purgatory by one day. QRP counts  
>double.

>

>Dale - People will line up all day to buy these Velvet Verniers at \$50/  
>ea. if they are in good condition. Let your conscience be your guide.

>

>Bruce Barley KB0PZD qrp-1 #69

>lbbbarley@feist.com

>

To the group-- (and Bruce especially)

I know--open admission of guilt... Had no choice, though... Stuff was  
headed for the dumpster...

I just couldn't do it. We have all seen this kind of construction:  
point-to-point wiring all hand-laced, resistors with leads wrapped around  
those neat little turret terminals and soldered, probably with a QRO iron.  
Not a transistor in the whole thing, Capacitors the size of those little  
bars of soap you get at a motel, marked with little colored dots or writing  
that can be read by forty-something year-old eyes. Connections made to the  
assembly with terminal strips with real screws, not those funny little  
ribbon cables which the strange connectors. Served honorably for years, day  
in and day out, watching the end of a power line. Nah, a dumpster was too  
dishonorable.

I will take my chances with purgatory over such a choice. Wait'll I get it  
home for final inventory. I will post to the list what is on the block for  
distribution, but I definitely see the makings of an antoona tenner there  
for me and a couple of others.

72--

Dale LeDoux - KD5QI  
Entergy Corporation  
Utility Supervisor

-----  
Date: Sat, 1 Nov 1997 13:00:31 -0800  
From: rheiss@sprynet.com (Rob Heiss)  
To: qrp-1@Lehigh.EDU  
Subject: [30082] Circad demo  
Message-ID: <199711012100.NAA14776@m5.sprynet.com>  
MIME-Version: 1.0

Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

Okay, I downloaded two different Circad free demo versions from the web and tried to use them to capture my 2n2222 transceiver schematic. I read the FAQ file from sci.electronics and it seems to confirm that the Circad demo library is seriously crippled.

I get the impression that Circad might work well for drawing wires on a board, starting with a netlist file. We don't need a pretty board right now; what we need is a way to share pretty schematic drawings via newsletters and the web, and I am still looking for free software to do that.

73, Rob K06KA  
rheiss@sprynet.com

-----  
Date: Sat, 1 Nov 1997 16:16:55 -0500 (EST)  
From: NilsBull@aol.com  
To: QRP-L@Lehigh.EDU  
Subject: [30083] Viking Ranger & such like historical stuff  
Message-ID: <971101161652\_1403014371@emout04.mail.aol.com>

Amigos,

I just posted to the boatanchors list about the Viking Ranger what I've got here. All this readin' about tube radios has got me thinking that I am just about nuts enough to try and get the ol' beast runnin'. Yeah, I know it ain't QRP in the least. But it lights up and makes the room warm. And if you're sittin' in my outhouse radio shack, you're gonna need the warm stuff when el Nin~o gets finished rippin' out yer antenna wires.

So if you wanna know, I'll make it short: The transmitter keys up even without a key in the key hole when I put it out of standby. And I ain't too sure that it is tunin' just then, 'cause I can't control what happens to the drive levels. At least that's what I remember from turnin' it on last time. Hmmm . . . gonna have to check on that. The box has the "keyer modification" stuff in it too, grid block keyin' and all that.

Now all I need is to find a "period" receiver what might look good sittin' on

the shelf/bench top with the Viking. Which would give me 9 shortwave receivers, with 3 of 'em tubers. And 7 transmitters, two of 'em tubers. If I turn 'em all on at once, I'd be able to talk to J.R. "Bob" Dobbs directly come 7 a.m. of July 5, 1998. Which is when the aliens are coming back again, as any true SubGenius knows.

Hints on gettin' the Viking to not key when it ain't supposed to be appreciated.

73

Nils

WB8IJN &c

. . . It's Ade's fault . . . all this talk of 01As and two tube transmitters and such . . . makes me yearn for the "not so shock-proof" days of my youth . . . "Just turn the plug around inna socket, Pa! That'll make junior stop floppin' around on the roof . . ."

-----  
Date: 1 Nov 97 15:13:16  
From: "mahlon.r.haunschild" <mahlon.r.haunschild@ac.com>  
To: jim w7ls <w7ls@brigadoon.com>  
Cc: "low power amateur radio discussion" <qrp-1@Lehigh.EDU>  
Subject: [30084] Silver contacts available, again  
Message-ID: <9711012123.AA9072@notes2.compuserve.com>  
Mime-Version: 1.0  
Content-Type: Text/Plain

I just received my contacts in the mail today. Choice, quality stuff!

Thanks, Jim, for doing this for us.

73

Mahlon - N4EEE

-----  
-----  
-----  
To: qrp-1 @ lehigh.edu ("low power amateur radio discussion") @ internet  
cc: (bcc: Mahlon R. Haunschild)  
From: w7ls @ brigadoon.com (Jim W7LS) @ internet  
Date: 10/20/97 07:44 PM  
Subject: Silver contacts available, again  
-----

-----  
Repeat of earlier message for those who tuned in late:

>Date: Tue, 14 Oct 1997 20:15:19  
>To: QRP-L group  
>From: Jim W7LS <w7ls@brigadoon.com>  
>Subject: Silver contacts available, again

>  
> Here we go, again. For those who are interested, I can provide silver plated copper contacts for making keyer paddles, straight keys, etc. These appear to be the same ones that you find on Vibroplex paddles, Bencher, MFJ, etc. About an eighth of an inch in diameter, made of copper, and silver plated. They have a mounting stud on the back, about an eighth of an inch long and a sixteenth of an inch in diameter.

> Here is how we worked it last time and it went fine: I can provide a set of 4 contacts (enough to make an iambic keyer paddle set) for a dollar and a self addressed stamped envelope. If you want more contacts, just include a buck for each set of 4 you want. I can provide pretty much any quantity that you want. One guy got 10 sets of 4! As for postage, even that didn't amount to more than a 32 cent stamp, so just put a 32 center on the SASE. I'll put however many you want into a little bag and stuff it in your SASE.

> This time, I don't need to hear from you on e-mail first. Just send the SASE asap (wow. What compression!) to me and I'll send them back in one lump. The drop-dead date for getting your order in is Halloween. Whatever orders I have by the time I go out trick or treating is what will go out a couple of days after that. Gotta' have time to sort through them.

> Summary: send a SASE and a buck for a set of 4 contacts to:

>  
>Jim Hossack W7LS  
>15221 342nd Ave, NE  
>Duvall, WA 98019

>  
> There are 3 or 4 letters requesting contacts from the last round, which will automatically be part of this next batch. Again, no need to e-mail me. Just send the buck and the SASE.

>  
> 73 de Jim, W7LS  
>

-----  
Date: Sat, 01 Nov 1997 12:37:24 -0900  
From: "Georgia Raynsford" <raynsford@gci.net>  
To: qrp-l@Lehigh.EDU

Subject: [30085] Re: trying to open 10 meters today! give me a call on 28.030...  
Message-ID: <3.0.2.32.19971101123724.00aec9e8@mail.gci.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 11:11 AM 11/1/97 -0800, you wrote:

>You may hear me using the KC2 keyer's repeat function to call CQ endlessly  
>on 28.030 today with 2 watts and a random wire. I checked the band, and it  
>seems to be partly open.

>

>Wayne

>N6KR

>

Qsl Wayne, will look for you om! I've been having good success into  
Asia and occasionally Austraila on 10 mtrs from 00 to 03 utc. Have a  
auxillary receiver setup on 28.2 mhz for the ncdxf beacons to spot  
openings.

Cheers! cul Wayne ...

AL7JK John Qth: Eagle River, Alaska  
Loc: BP51FH

e-mail: raynsford@gci.net  
packet: al7jk@k17aa.#nak.ak.usa.noam

-----  
Date: Sat, 01 Nov 1997 17:02:49 -0500 (EST)  
From: n4js@amsat.org  
To: NilsBull@aol.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [30086] RE: Viking Ranger & such like historical stuff  
Message-ID: <XFMail.971101170935.n4js@amsat.org>  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 8bit  
MIME-Version: 1.0

On 01-Nov-97 NilsBull@aol.com typed:

> . . . It's Ade's fault . . . all this talk of 01As and two tube transmitters  
>and such . . . makes me yearn for the "not so shock-proof" days of my youth .  
>. . "Just turn the plug around inna socket, Pa! That'll make junior stop  
>floppin' around on the roof . . ."

Funny great(?) minds must run alike. I am working on a Ranger, also. I just have to finish replacing the meter switch, which burned up from collected crud on it.

The above reminded me of my youth. My Dad had me go up to fix the beam. It was on a telephone pole, with a BIG aluminum ladder permanently fastened. There was a platform even, at the top. I went up the ladder, and grabbed the mast...and flopped around, couldn't let go. All I could do was yell..."pull the fuses!" Seems there was a short in the wiring to the old prop-pitch rotor and 110 was on that mast! Well, my dad pulled the fuses, and I draped limply over the platform. He yelled "You OK?" I said yes, but I couldn't move for a while. He then said "Well, as long as you're up there, why don't you fix the damn thing?"

It's a wonder I survived my youth. Another time...how I went through Pop's Hammond Organ speaker from across the room, working on my first Amp, with a voltage doubler supply, and no bleeder.... caught H\*\*\* for THAT one!

Sent at 17:09:35 on 01-Nov-97

```
John L. Sielke n4js@amsat.org n4js@pobox.com  
| _ | _ | _ | _ | _ / _ |  
n4js@qsl.net NJ Grid:FM29LN  
| . ` ||_ _|| || \__ \  
http://www.qsl.net/n4js NJ-QRP #57 QRP-L #884  
|_| \_ | _ | \__ / |___/  
QRP-ARCI CQC #443 CQrp #50 AKQrp ARQrp  
NE-ORP #507 G-ORP #9544 NorCal #1989 OCWA FISTS #2781 ARS #243
```

Date: Sat, 1 Nov 1997 19:51:38 +0000  
From: Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>  
To: gqrp-l@blacksheep.org, qrp-l@Lehigh.EDU  
Subject: [30087] Bad URL, my web pages  
Message-ID: <zNFuwCAKh4W0Ew+d@gqrpclub.demon.co.uk>  
MIME-Version: 1.0

Sorry guys, some poor typing here, so the new stuff did not work. I have hopefully corrected the errors now and will rescan the pic of my GQ2000 as it has turned out pretty naff.  
More later...

Frank, G3YCC  
QRP web page: <http://www.gqrpclub.demon.co.uk>

Date: Sat, 1 Nov 1997 18:01:38 -0500 (EST)  
From: WBONZM@aol.com  
To: rheiss@sprynet.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [30088] Re: Circad demo  
Message-ID: <971101180024\_1591470871@mrin45.mail.aol.com>

In a message dated 97-11-01 16:02:33 EST, you write:

<< Okay, I downloaded two different Circad free demo versions from the web and tried to use them to capture my 2n2222 transceiver schematic. I read the FAQ file from sci.electronics and it seems to confirm that the Circad demo library is seriously crippled.

I get the impression that Circad might work well for drawing wires on a board, starting with a netlist file. We don't need a pretty board right now; what we need is a way to share pretty schematic drawings via newsletters and the web, and I am still looking for free software to do that.

>>

Rob, the Circad demo works very well to draw nice, pretty schematics - I've done it.

The program is 'crippled', but not 'seriously' for what we all need to do here. In fact, the schematic drawing portion is 'crippled' only in the size of the file that can be saved, which should be more than adequate for this use.

The parts libraries that come with the demo version of Circad are not as 'full' as the commercial package, but they do include many of the more common parts, and it's not hard to add parts to a library file.

John

-----  
Date: Sat, 01 Nov 1997 18:48:58  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-1@Lehigh.EDU  
Subject: [30089] 2N2 project  
Message-ID: <3.0.1.16.19971101184858.26bfff3c@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Well, I'm hearing 40 cw on my 2N2 Rx strip. Even DX last night. Although I

must admit, for now I'm cheating, using a DDS VFO for the LO. Kinda Ironical, 11 NPN transistors for the receiver and a couple of million in the VFO :-)

On the Rx, I took out the CA3028 clone IF amp cuz it liked to take off and oscillate. Sub'ed a cascode amp and that works very well. Think we're best off using the 3028 clone just for mixing.

My first pass at a 2N2 VFO is still jumping around an hour after I removed the soldering iron from it's insides. It's only jumping 100's of Hz's now, instead of 10,000's of Hz like when I first turned it on. Now I remember why I invested so much making DDS VFO's. I got tired of trying to make a good analog VFO. It's looking like this is one area where ugly construction just will not cut it.

It may take from now to May to get a good working VFO made. Unless I just give up and use a VXO. Anyone got a stock of 11.473 Mhz xtals kicking around? ( $11.473 - 7.040 = 4.433$  Mhz IF)

I was hoping to use low side injection of 2.567 Mhz where the VFO was pretty stable, but it turns out the 4th harmonic mixes with SWB station from 5.835 and up to give a 4.433 Mhz product. Very loud ones at that.

Getting there, but still some serious work to do...

72N2 2U2,  
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----

End of QRP-L Digest 896

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